

# TRESBP ENVIRONMENTAL MONITORING SUMMARY

## MARCH 2012

### OVERVIEW

In March, 2012:

- 15,536 m<sup>3</sup> of sand was pumped to Duranbah Beach and 26,330 m<sup>3</sup> of sand was pumped to Snapper Rocks East.
- There were a number of media articles relating to the extension of the Kirra Point groyne as a means of resurrecting the surf break. These were not related to the Project. One article by Peter Turner, a former Gold Coast City Councillor and Deputy Mayor related to the Kirra surf break and viewed a positive opinion of the Project.
- Sea conditions were average for most of the month with three moderate sea events (5<sup>th</sup>, 23<sup>rd</sup> and 30<sup>th</sup>) with maximum significant wave heights up to 2.5 m.
- 1,462 vessel crossings were recorded for the month (this is about 16% less than the March average).
- The estimated amount of sand moving north towards the Tweed River Entrance by natural processes is in the order of 50,000 m<sup>3</sup> (this is about 82% of the March average).

### 1. SAND PUMPING & DREDGING

#### **Sand Delivery March 2012**

Pumped:	41,866 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	41,866 m <sup>3</sup>

#### **Sand Delivery January to March 2012 (YTD)**

Pumped:	99,317 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	99,317 m <sup>3</sup>

#### **Sand Delivery January to March 2011**

Pumped:	116,116 m <sup>3</sup>
Dredged:	0 m <sup>3</sup>
Total:	116,116 m <sup>3</sup>

#### **Stage II Sand Delivery May 2000 to March 2012**

Pumped:	6,428,224 m <sup>3</sup>
Dredged:	2,039,100 m <sup>3</sup>
Total:	8,467,325 m <sup>3</sup>



Department of **Environment**  
and **Resource Management**

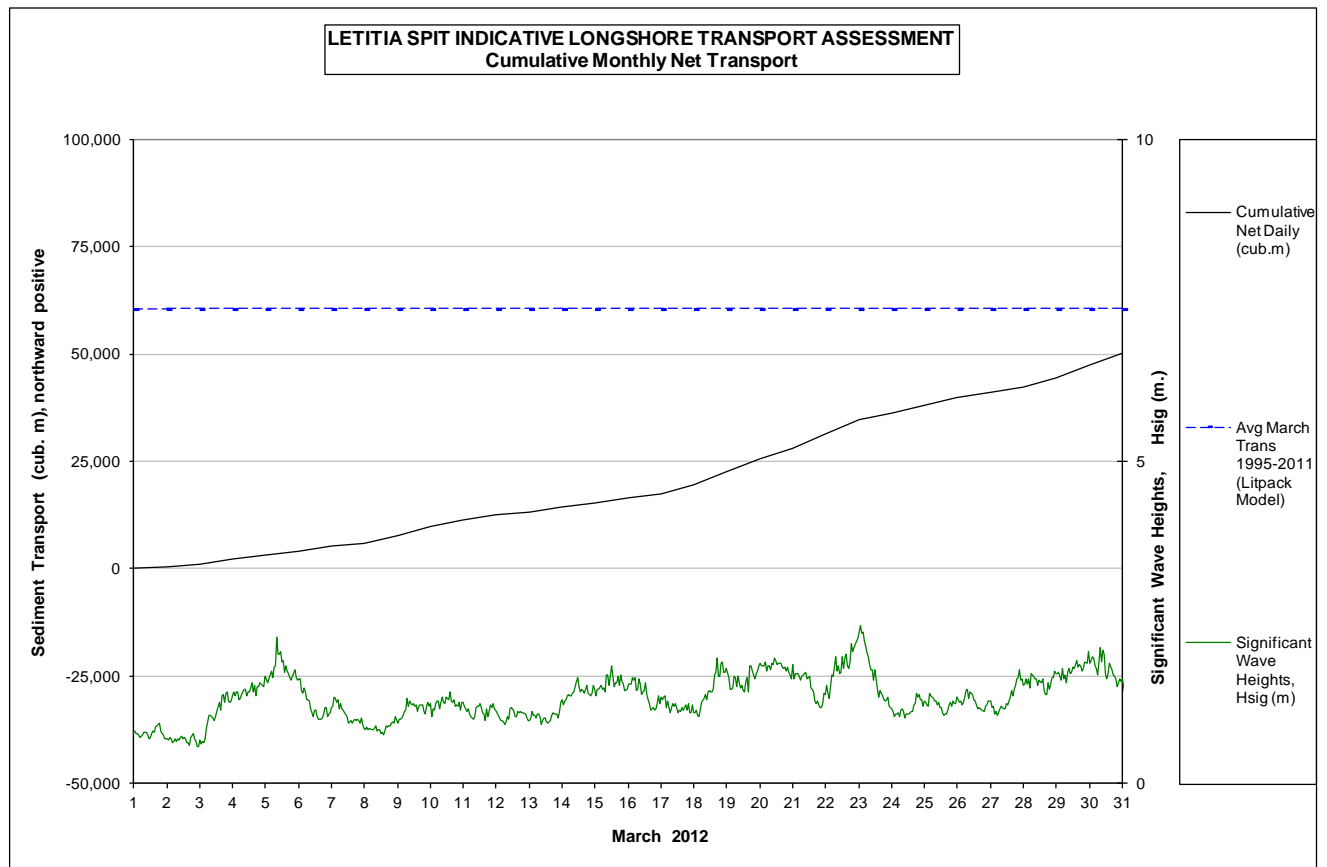


## 2. INDICATIVE LONGSHORE TRANSPORT

The graph below is based on simplified sediment transport modelling and is indicative only.

In March 2012 the estimated natural sand transport (moving N towards Tweed entrance): to be in the order of 50,000 m<sup>3</sup>.


This result is just below the average sand transport quantity of approximately 61,000 m<sup>3</sup> for the month of March (ie about 82% of the average).



## 3. MEDIA COVERAGE

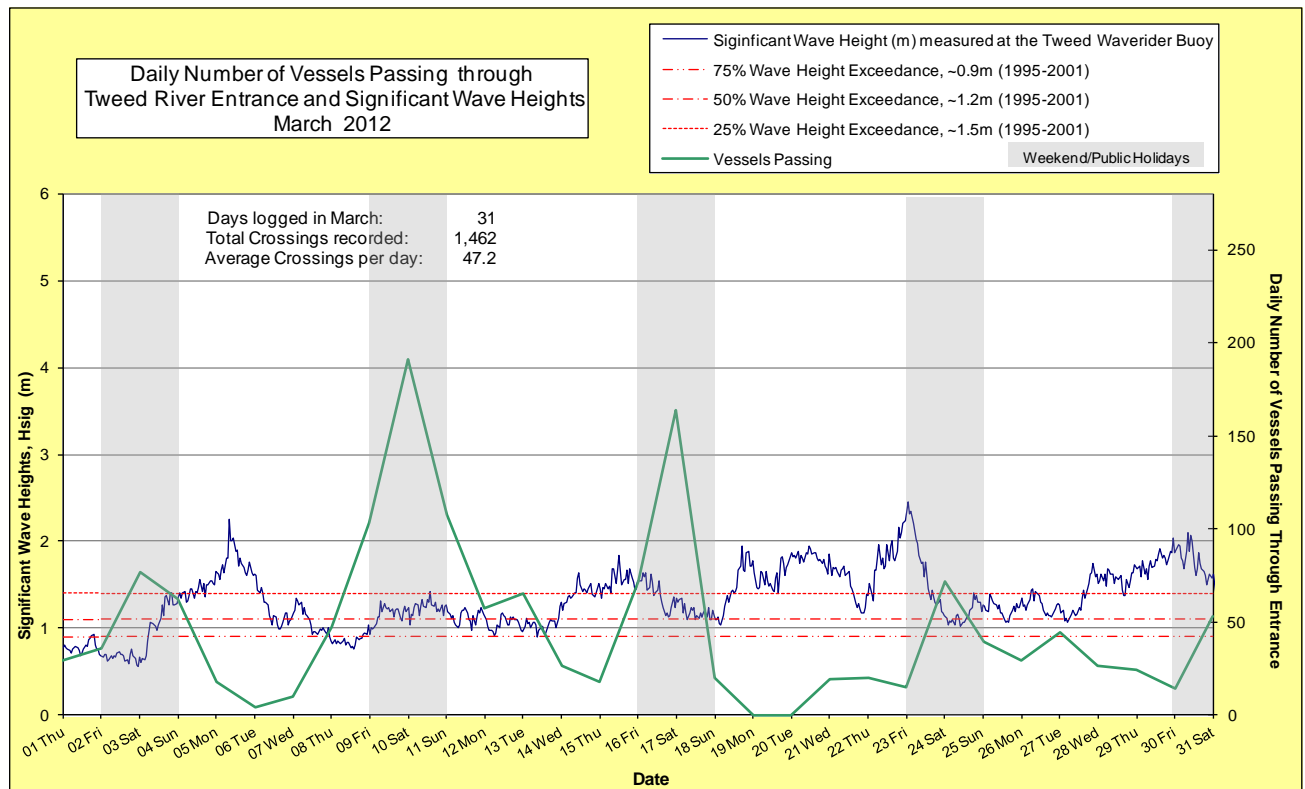
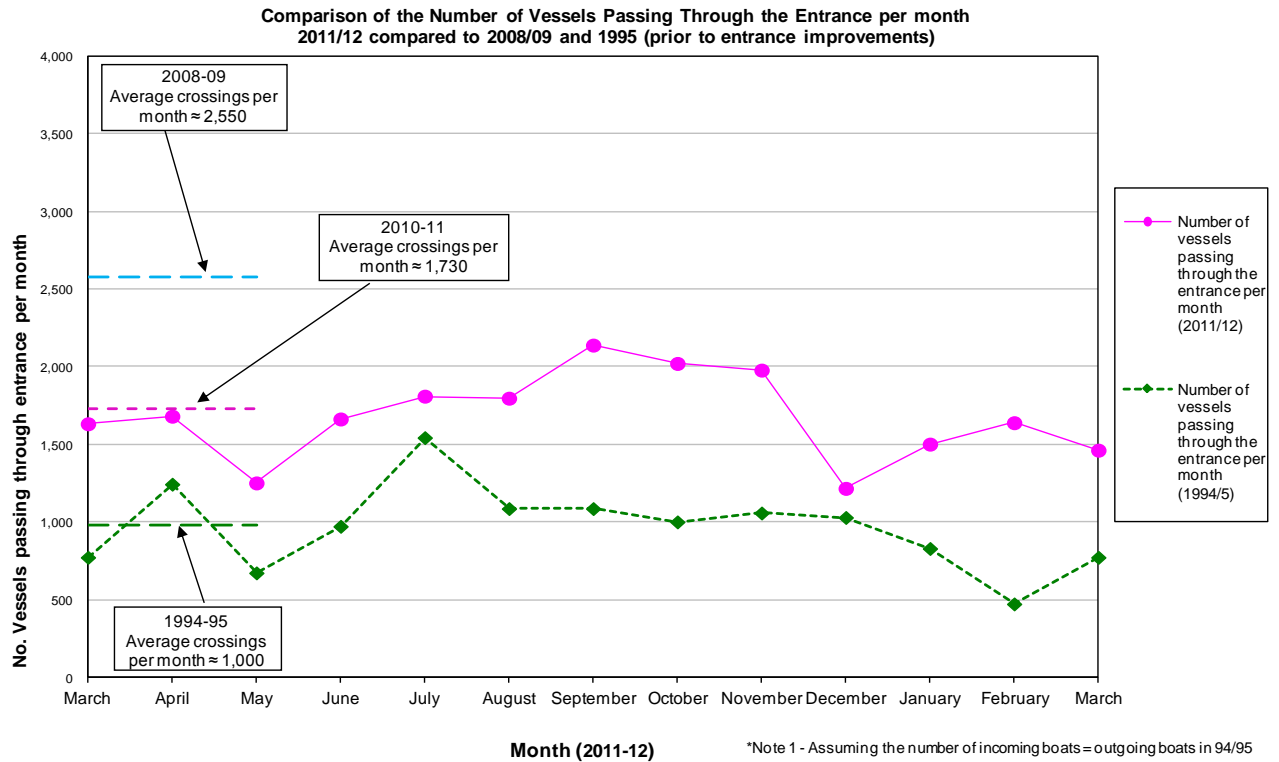
**[www.goldcoast.com.au](http://www.goldcoast.com.au), 19 March 2012: Waves go with the sand (an article written by Peter Turner)**

*"As I have been involved with the Kirra Point issue for many years I feel it is timely to remind some people of the history behind the events, because it is clear from comments that are being made that the facts are little understood. .".*

**4. TWEED RIVER ENTRANCE CONDITIONS****MARINE RESCUE NSW - MONITORING RESULTS**
 Weekends and public holidays

Date	Navigation Rating Impassable-----Good					Number of Boats
	Impassable (1)	Difficulty Encountered (2)	Some Difficulty Encountered (3)	Relatively Good Crossing (4)	Good Conditions (5)	
1 <sup>st</sup>						29
2 <sup>nd</sup>						36
3 <sup>rd</sup>						77
4 <sup>th</sup>						62
5 <sup>th</sup>						18
6 <sup>th</sup>						4
7 <sup>th</sup>						10
8 <sup>th</sup>						47
9 <sup>th</sup>						103
10 <sup>th</sup>						191
11 <sup>th</sup>						108
12 <sup>th</sup>						57
13 <sup>th</sup>						65
14 <sup>th</sup>						26
15 <sup>th</sup>						18
16 <sup>th</sup>						72
17 <sup>th</sup>						164
18 <sup>th</sup>						20
19 <sup>th</sup>						0
20 <sup>th</sup>						0
21 <sup>st</sup>						19
22 <sup>nd</sup>						20
23 <sup>rd</sup>						15
24 <sup>th</sup>						72
25 <sup>th</sup>						39
26 <sup>th</sup>						29
27 <sup>th</sup>						44
28 <sup>th</sup>						26
29 <sup>th</sup>						24
30 <sup>th</sup>						14
31 <sup>st</sup>						53
Total						1,462

Source: Marine Rescue NSW, Point Danger



## 5. WAVE & SURFING CONDITIONS

Dominant swell condition: Significant wave heights were average for most of the month (1 m to 1.7 m) and three moderate sea events (5<sup>th</sup>, 23<sup>rd</sup> & 30<sup>th</sup>) with maximum significant wave heights to 2.5 m. Swell direction ranged from ENE to ESE but dominantly from the ESE.

Moderate sea events: 5<sup>th</sup>, 23<sup>rd</sup>, and 30<sup>th</sup> March.

Monthly minimum significant wave height: 0.56 m on 2<sup>nd</sup> March.

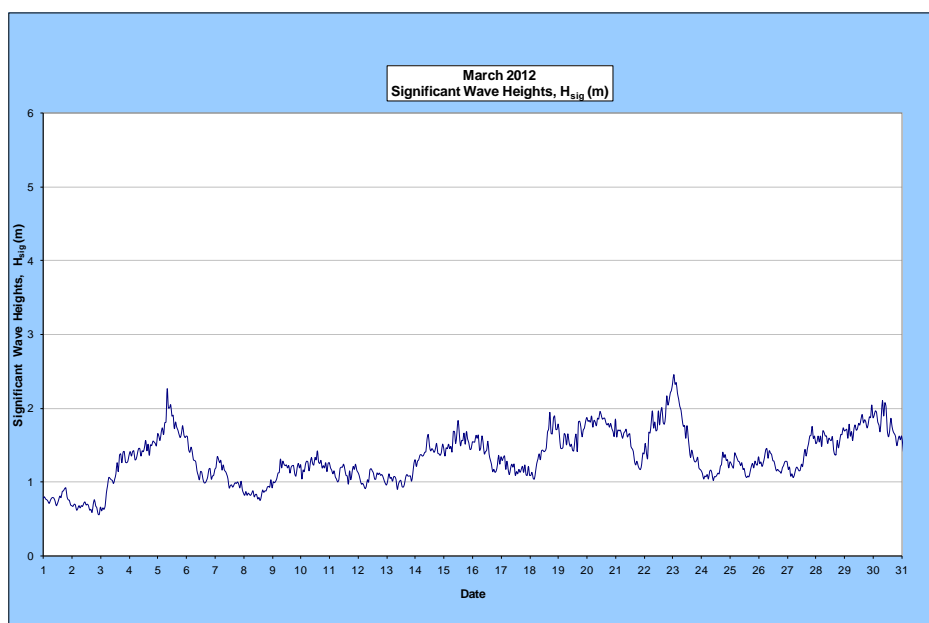
Monthly maximum significant wave height: 2.5 m on 23<sup>rd</sup> March.

Number of days on which waves were below 1.0 m: 6 days

Number of days on which waves were above 2.0 m: 3 days

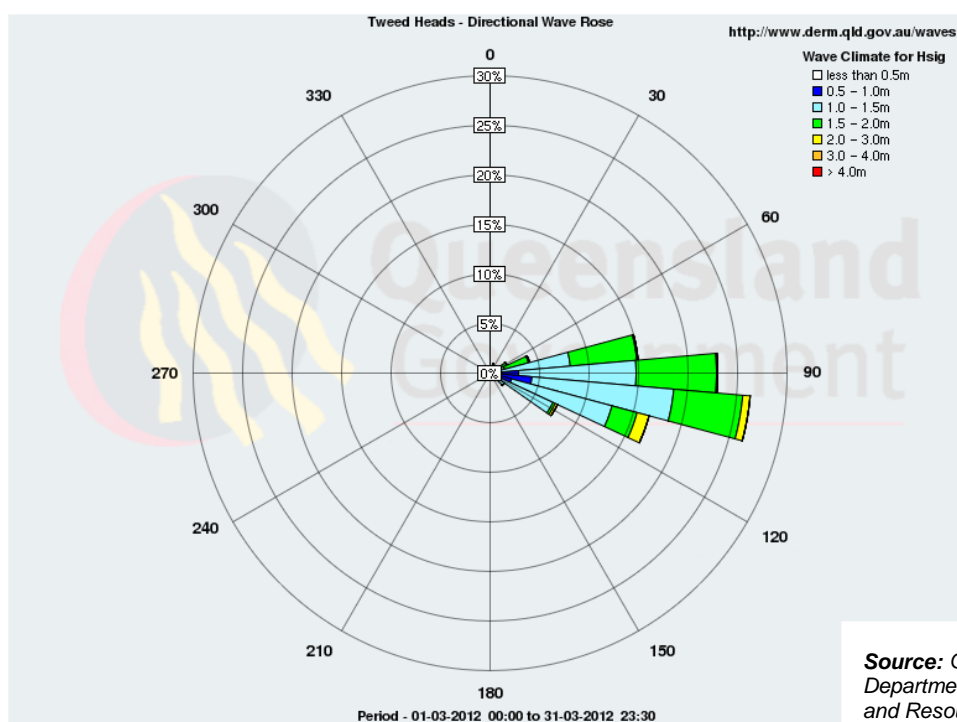
**Note:** Significant wave heights or  $H_{sig}$  are the average of the highest one third of recorded waves.

(Source: Tweed & Brisbane Wave Buoy; QDERM)



A link to data recorded by the Tweed Waverider Buoy is available at: <http://www.derm.qld.gov.au/waves>

## WAVE DIRECTION



Source: Queensland  
Department of Environment  
and Resource Management

## UPCOMING SURF AND SURF LIFESAVING EVENTS

- CHIKO - MP Classic, 14 & 15 April 2012, Coolangatta, Qld
- CHIKO - Alley Classic, 5 & 6 May 2012, Currumbin Alley, Qld
- Queensland Masters/Women's Surfing Series-Event 1, 12 & 13 May 2012,, Gold Coast, Qld
- 2012 Bradnam's Windows & Doors Queensland Longboard Titles, 2 & 3 June 2012, Gold Coast, Qld
- Surfing Queensland SUP & Ocean Paddle Festival – XCEL OPEN OCEAN PADDLE RACE (Long Course), 9 June 2012, Gold Coast, Qld
- Surfing Queensland SUP & Ocean Paddle Festival – SUP SURFING, 10 & 11 June 2012, Currumbin Alley, Qld
- Surfing Queensland SUP & Ocean Paddle Festival – SUP TECHNICAL SPRINT RACING, 11 June 2012, Currumbin Beachfront (Primary Location), Qld
- 2012 Billabong Occy's Grom Comp, 30 June to 4 July 2012, Gold Coast Qld

## PHOTOGRAPHS OF SURF CONDITIONS



Duranbah, 7 March 2012  
(source: Coastal Watch)



Rainbow Bay, 8 March 2012  
(source: Coastal Watch)



Greenmount Point, 14 March 2012  
(source: Coastal Watch)



Rainbow Bay, 21 March 2012  
(source: Coastal Watch)



Duranbah, 21 March 2012  
(source: Coastal Watch)



Greenmount, 29 March 2012  
(source: Coastal Watch)

## SURF REPORT OVERVIEW

DATE	SURF	DIRECTION	COMMENTS
1	Peak, 0.3-0.45m	E	Swell seems to have declined since first light. Next to no energy
4	Messy, 0.6-0.9m	E	Poor conditions with onshore ENE winds and a messy E swell.
5	Sloppy, 0.6-0.9m	E	It's an onshore mess. Head to the points with Snapper to Greenmount for the pick of an ordinary bunch.
6	Clean, 0.6-0.9m	SE	Fun sized SE swell. Try D'bah and S end beachies early on the high tide with full ones on the points that will improve on the dropping tide.
7	Clean, 0.6m	E	Small & clean, magnets & Tweed Coast on bigger side of 0.6m.
8	Clean, 0.3-0.6m	E	Not much doing this morning. Clean, almost perfect, surface conditions being offset by next to no swell
9	Clean, 0.6m	ESE	A good looking morning with a small, clean ESE swell. D'bah, and S end beaches are the pick early on the incoming tide and there are some very small ones on the points that are filling up fast.
10	Clean, 0.6-0.9m	ESE	A good looking day with a small, clean ESE swell. D'bah, and S end beaches are the pick early again on the incoming tide and there are some small ones on the points before they fill in too much with the high tide.
11	Clean, 0.6m	ESE	A small, clean ESE swell. D'bah and S end beaches are the pick early again on the incoming tide and there are some small ones on the points before they fill in too much with the high tide.
12	Clean, 0.6m	ESE	Small and clean with an ESE swell. Once again D'bah, and S end beaches are the pick early again on the incoming tide and there are some small fun ones on the points.
13	Clean, 0.6m	ESE	Small, fairly weak swell from the ESE, there's just not much punch behind them.
14	Bumpy, 0.6m	E	Pretty ordinary. Swell looks a fraction bigger than yesterday.
15	Clean, 0.6-0.9m	ESE	Some shapely little beach break action, or some little point drainers. The choice is yours.
16	Clean, 0.9m	ESE	Some fun waves about on the incoming tide. Swell is a bit bigger on the open beaches.
19	Clean, 0.6-0.9m	SE	Head to the points for a smaller wave after the early morning high. D'bah and there'll be fun ones on the points as the tide drops during the morning with from Snapper to Greenmount the pick.
20	Choppy, 0.9-1.2m	SE	Hard to recommend anywhere, but if you're keen the Snapper to Greeny end of Coolie.
21	Clean, 0.9m	SE	Points are the best value even though they are a little full early with from Snapper to Coolangatta the pick.
22	Clean, 0.9-1.2m	SE	The Points are the pick even as the tide gets higher with from Snapper to Coolangatta the best. D'bah is bigger and looking good.
23	Clean, 0.9-1.2m	SE	Still a healthy amounts of SE swell. The points are handling conditions the best with from Snapper to Coolangatta the pick.
26	Sloppy, 0.3-0.6m	SE	Conditions far exceed what could be reasonably called gurgle. Quality is very average this morning, D'bah a touch bigger.
27	Clean, 0.6m	E	Snapper has a few waist high peelers.
28	Clean, 0.9m	E	Washy in close with some good sections out the back. Snapper through to Coolie, the pick out of the southerly wind and lining up nicely.
29	Clean, 0.9-1.2m	E	There are some jewels on the open beachies in among the sweeping closeouts. Snapper to Coolangatta is the pick, but will be crowded.

**Source:** Swellnet & CoastalWatch Surf Report

Generally, March experienced average waves for most of the month (0.7 to 1.7 m), with three moderate sea events on the 5<sup>th</sup>, 23<sup>rd</sup> (with maximum significant wave heights to 2.5 m) and 30<sup>th</sup>.



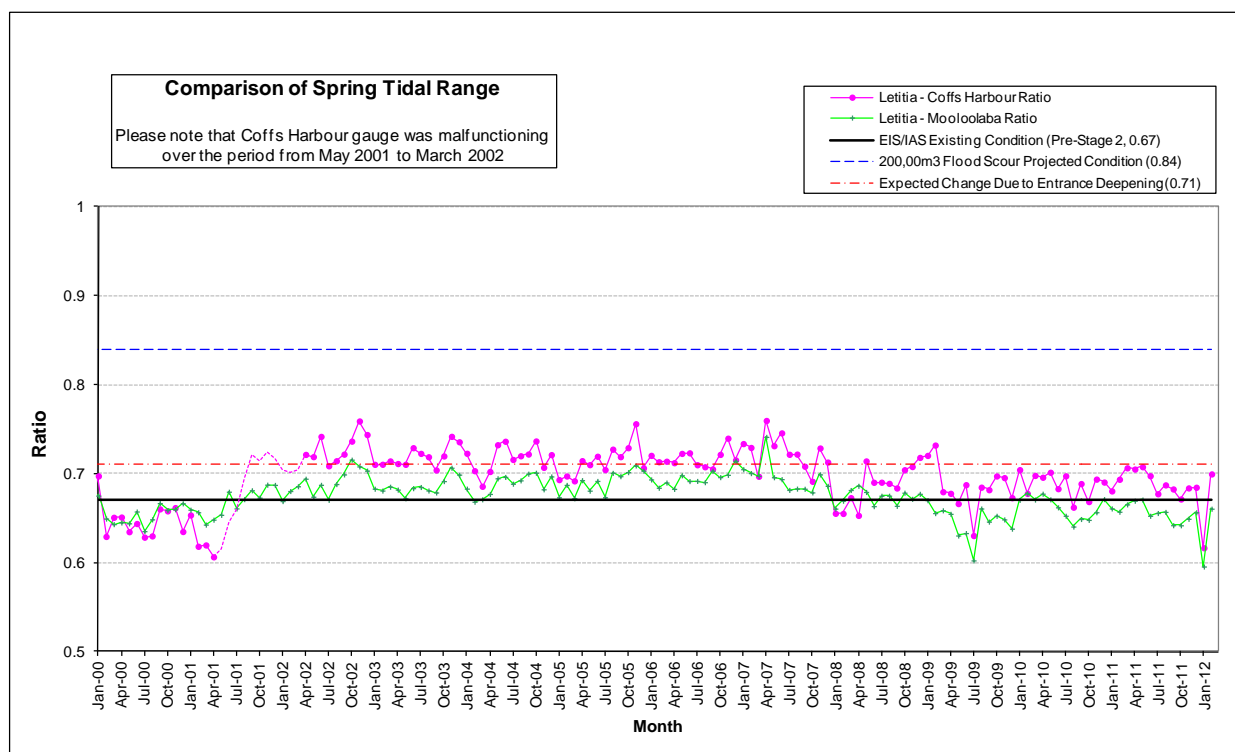
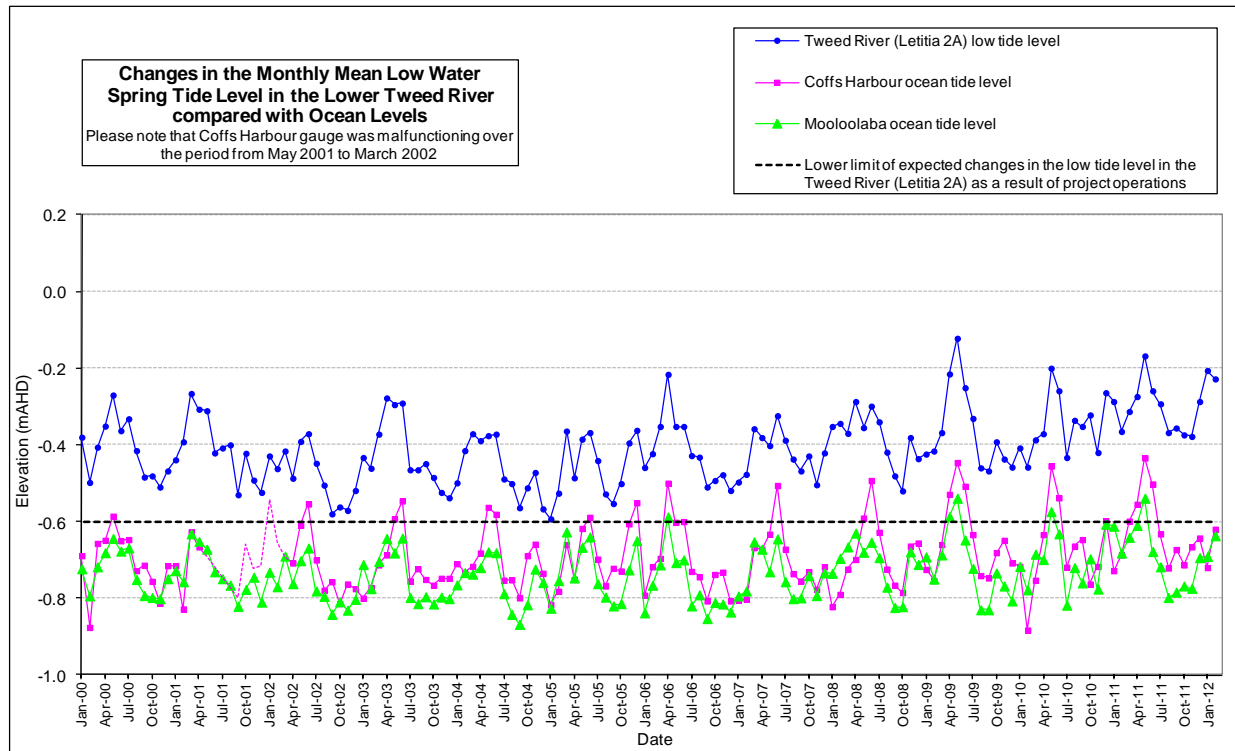
## 6. TIDES

Tweed River Mean Low Water Spring (MLWS) tide level varied from a minimum of -0.378 m AHD to a maximum of -0.206 m AHD for the six months September 2011 to February 2012. This is similar to the natural river tidal behaviour prior to project operations.

Over the last six months (September 2011 to February 2012) the river spring tidal range behaviour has been similar to the natural behaviour observed prior to project operations.

The TRESBP has not had a significant impact on the Lower Tweed River tidal behaviour to February 2012.

Next set of data is due in August 2012 (six months).



END